

## Remarks

### **1. Summary of Office Action**

In the final office action mailed August 29, 2006, the Examiner maintained the rejection of all of the pending claims 6, 12, 15-20, and 27-29 under 35 U.S.C. § 101 as being non-statutory. Further, the Examiner rejected all of the pending claims on grounds of alleged obviousness over a combination of *five* prior art references selected by the Examiner, namely U.S. Patent No. 6,460,036 (Herz), U.S. Patent No. 6,654,735 (Eichstaedt), U.S. Patent No. 5,821,929 (Shimizu), U.S. Patent No. 5,724,567 (Rose), and U.S. Patent No. 6,871,236 (Fishman).

### **2. Status of the Claims**

Presently pending are claims 6, 12, 15-20, and 27-30, of which claims 6, 12, and 27 are independent and the remainder are dependent.

The invention as claimed is directed to a method for measuring and using an Internet user's interest in a given subject. Each independent claim provides for establishing a "capped page keyword count" for each web page sent to the user by counting up all of the keywords found in the web page that are related to the given subject. The capped page keyword count is capped such that its value is not greater than a predetermined maximum number of keywords. The capped page keyword count is then summed to establish a count of keywords that is "not greater than the count of web pages multiplied by the predetermined maximum number of keywords."

In addition to the upper limit provided by the capping, claims 12 and 27 both provide for a lower threshold value for establishing a subject-specific page count value S. S represents a number of web pages sent to the user that each contain at least a threshold number of keywords

related to the given subject. It is clear from the specification as filed that this subject-specific page count threshold cannot be zero, otherwise this claim limitation would be meaningless. Accordingly, Applicant has amended claims 12 and 27 to recite expressly that the subject-specific page count threshold is non-zero.

Independent claims 6 and 12 further recite carrying out various steps at a mobile IP home agent configured to pass IP communications to the user. Mobile IP is a very well known communications protocol that is designed to allow mobile device users to move from one network to another while maintaining a permanent IP address.

Independent claim 12 also includes limitations requiring establishment of (i) a total page count representing the number of web pages sent to a user; (ii) a subject-specific page count representing the number of web pages sent to the user that have a threshold number of keywords related to the subject and; (iii) the count of keywords related to the subject that appear in the web pages. In claim 12, these values are combined to establish a measure of the user's interest in the subject matter. Dependent claim 15 then provides that values (i)-(iii) be combined by multiplying the count of keywords (K) by the subject-specific count (S) divided by the total page count (P).  $[(K)(S)/(P)]$ .

### **3. Response to § 101 Rejection**

As noted above, the Examiner rejected all of the pending claims under § 101 as allegedly not reciting patentable subject matter. The Examiner asserted that determining a user's interest in a subject is not a concrete, tangible, and useful result and is therefore not statutory subject matter under 35 U.S.C. § 101.

Applicant has amended each of the independent claims to be directed to a method for measuring *and using* an Internet user's level of interest in a given subject, by amending the

preamble of each claim and adding as a last element in the body of each claim the language "using the established measure of the user's interest level as a basis to provide information to the user." The specification as filed gives examples of this useful, concrete, and tangible function, including for instance, (i) determining that the level of interest exceeds a threshold level and responsively sending to the user an e-mail with information related to the subject and (ii) providing the user with a list of hyperlinks that is advantageously sorted in accordance with the user's determined level of interest in various associated subjects. Other examples are possible as well. Applicant submits that these claim amendments overcome the § 101 rejection.

#### **4. Response to § 103 Rejections**

As noted above, the Examiner rejected all of the pending claims as being allegedly obvious over a combination of five references.

First, Applicant submits that it would have been extremely unlikely for a person of ordinary skill in the art to have combined together so many references in the manner suggested by the Examiner. Applicant recognizes that the mere number of references is not a sufficient basis *in and of itself* to establish lack of a *prima facie* obviousness. M.P.E.P. § 2145(V). However, Applicant submits that the Examiner's use of so many hand-picked references seems to suggest some level of improper hindsight analysis using Applicant's claims as a blueprint, which the M.P.E.P. prohibits. *See* M.P.E.P. § 2143 ("The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.")

Second, and perhaps more importantly, the art cited by the Examiner does not teach the invention recited in Applicant's claims. Therefore, even if we disregard the hindsight analysis, *prima facie* obviousness does not exist, and the claims should be allowed.

**a. The Cited Art Does not Disclose or Suggest the Claimed Use of a Mobile IP Home Agent.**

By the last response, Applicant amended claims 6 and 12 to recite that elements of Applicant's invention are carried out at a "mobile IP home agent". Those of ordinary skill in the art know that the term "mobile IP home agent" has a very specific meaning in the industry. A mobile IP home agent is not *merely* a gateway. In mobile IP, a home agent registers the current location of a mobile node, such as by registering the IP address of a foreign agent as a care-of address of the mobile node, and the mobile node obtains a mobile IP address. Traffic destined to the mobile node's mobile-IP address is typically routed to the mobile IP home agent, and the home agent then forwards the traffic for delivery to the mobile node's actual address, such as by forwarding the traffic to the mobile node's currently serving foreign agent (care-of address) and having the foreign agent then forward the traffic in turn to the mobile node.

Mobile-IP, including the concept of a "mobile IP home agent," is very well defined in the industry. *See, e.g.*, the mobile-IPv4 standard, described in Perkins, "IP Mobility Support for IPv4", Request for Comments 3344, August 2002, and the mobile-IPv6 standard, described in Johnson, "IP Mobility Support for IPv6", Request for Comments 3775, June 2004. As such, the Examiner is required to give the term "mobile IP home agent" its well known, ordinary and customary meaning. M.P.E.P. § 2111.01.

In rejecting claims 6 and 12, the Examiner stated that the cited Herz, Eichstaedt, Shimizu, and Rose references "did not expressly teach the algorithm occurring in a mobile IP gateway",

and the Examiner then turned to the Fishman reference in an effort to establish that is known to apply an algorithm in a mobile IP gateway.

In so analyzing claims 6 and 12, the Examiner has disregarded Applicant's claim language, which used the term "mobile IP home agent," not merely the term "mobile IP gateway." Thus, at issue is not whether the cited art teaches conducting the recited functions at a "mobile IP gateway." At issue is whether the cited art teaches conducting the recited functions at a "mobile IP home agent." The Examiner has not asserted that the prior art teaches this particular element. Therefore, the Examiner has not established *prima facie* obviousness of claims 6 and 12.

Furthermore, the Fishman reference cited by the Examiner does not teach a mobile-IP home agent carrying out the functions that claims 6 and 12 recites being carried out by a mobile IP home agent. In fact, the Fishman reference does not mention a mobile IP home agent at all. And contrary to the Examiner's assertion, the Fishman reference does not even mention a "mobile IP gateway." Fishman relates to a mobile gateway that can cache and transform content being provided to a mobile client from a content server. At best, Fishman teaches that transformations can be done based upon mobile user interests. (See column 5, lines 46-57). However, Fishman does not teach having a mobile IP home agent, or even Fishman's mobile gateway, carry out the functions that claims 6 and 12 recites being carried out by a mobile IP home agent.

Still further, the Examiner has not pointed to any objective evidence that would suggest modifying the teaching of Fishman to achieve the presently claimed invention. In discussing Fishman, the Examiner merely expressed the subjective belief that it would be obvious to combine Fishman's teaching with that of the other cited art "in order to provide an efficient

method of measuring a user's interest in a plurality of mobile users, thereby resulting in an increased use of the system." Yet the Examiner pointed to no objective evidence supporting such a subjective belief. For this reason as well, the Examiner has failed to establish *prima facie* obviousness of claims 6 and 12. (See *In re Fine*, 837 F.2d 1071, 1074 (Fed. Cir. 1988) (explaining that the Examiner can only meet the burden of establishing a *prima facie* case of obviousness "by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art [that] would lead that individual to combine the relevant teachings of the references." See also *In re Lee*, 277 F.3d at 1342-43 (stating that rejections under 103 must be based on evidence)).

In summary, for at least these reasons, the Examiner has not established *prima facie* obviousness of claims 6 and 12. Therefore, Applicant submits that claims 6 and 12 are allowable. Further, Applicant submits that dependent claims 15-20 are allowable for at least the reason that they depend from allowable claim 12.

**b. The Cited Art Does Not Disclose or Suggest  
Use of a Count Keyword Threshold**

Claims 12 and 27 provide for establishing a count of web pages sent to a user that each contain *at least a threshold number of keywords related to the given subject*. Beneficially, the threshold number may allow for greater specificity in identifying interest in a given subject and also may reduce server load, for instance.

The Examiner has asserted that Herz teaches this function of counting pages that each contain at least a threshold number of keywords related to the given subject, citing to Herz at column 13, lines 5-17, column 15, lines 25-34, and column 17, lines 10-24. Applicant has reviewed these portions of Herz, however, and submits that they do not teach this claim element, for at least the reasons set forth in Applicant's last response.

In the final office action, the Examiner attempted to rebut Applicant's position regarding this claim element by asserting that the recited "threshold" could be zero and therefore that the claim element would be eliminated or "mitigated" from the claim:

Applicant has not defined what is sufficiently meant by "threshold number of keywords related to a given subject". As such this threshold value can be defined as any page having any number of keywords, including zero. By this rationale, this effectively mitigates this argument and this limitation and therefore this rejection is maintained.

See final office action, at page 10, section 8. Applicant submits that this position by the Examiner is erroneous.

Applicant's specification as filed explains what the subject-specific page count threshold means, providing examples, at page 14-15. It is clear from the specification and from claims as filed that this subject-specific page count threshold cannot be zero, otherwise this claim limitation would be entirely meaningless, which would make no sense. Nevertheless, to prevent the Examiner from reading this limitation out of Applicant's claims, Applicant has amended claims 12 and 27 to expressly recite that the threshold is "non-zero" – as must be the case given any reasonable interpretation of the specification and claims.

Because Herz does not teach this claim limitation, and because the Examiner relied exclusively on Herz in an attempt to establish this limitation in the context of Applicant's claimed invention, the Examiner has not established *prima facie* obviousness of claims 12 and 27. Therefore, Applicant submits that claims 12 and 27 are allowable. Further, Applicant submits that dependent claims 15-20 and 28-30 are allowable as well for at least the reason that they each depend from allowable claim 12 or allowable claim 27.

**c. Other Assertions**

Applicant does not concede in the other assertions made by the Examiner but submits that those other assertions are moot in view of the above points.

**5. Conclusion**

In view of the foregoing, Applicant submits that claims 6, 12, and 15-20 and 27-30 are now in condition for allowance, and Applicant therefore respectfully requests favorable reconsideration and allowance of the claims.

Should the Examiner wish to discuss this case, the Examiner is invited to call the undersigned at (312) 913-2141.

Respectfully submitted,

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